

Amendments to the Claims

Please amend claims 1 – 9, 12, 14, 16 – 17, 19 – 26, and 29 - 42 and withdraw claims 5, 8, 22, and 40 without prejudice, as indicated herein. This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A magnetic head comprising:
 - a.) a ~~bottom~~ first pole;
 - b.) a writer element, said writer element comprising at least one conductive coil, said coil being electrically insulated by a ~~composition which~~ first insulating layer that has a negative coefficient of thermal expansion, ~~and~~
 - c.) ~~a second insulating layer covering at least a portion of said insulating composition.~~
2. (Currently Amended) The magnetic head of claim 1, wherein said first insulating ~~composition layer~~ is selected from the group consisting of a crystalline material, an amorphous material, and a polycrystalline material.
3. (Currently Amended) The magnetic head of claim 2, wherein said first insulating ~~material layer~~ comprises a polycrystalline material.
4. (Currently Amended) The magnetic head of claim 3, wherein said first insulating ~~material layer~~ is isotropic in its thermal expansion.
5. (Withdrawn) The magnetic head of claim 3, wherein said first insulating ~~material layer~~ is anisotropic in its thermal expansion properties.
6. (Currently Amended) The magnetic head of ~~claim~~ claims 4 and 5, wherein said first insulating ~~material layer~~ comprises a ceramic.

7. (Currently Amended) The magnetic head of claim 4, wherein said ~~isotropic first~~ insulating ~~material~~ layer comprises a ceramic, said ceramic selected from the group consisting of ZrW_2O_8 , HfW_2O_8 , ZrV_2O_7 , HfV_2O_7 , $\text{ZrV}_{(2-x)}\text{P}_x\text{O}_7$, $\text{ZrW}_{(2-x)}\text{Mo}_x\text{O}_8$ (wherein $X \leq 1.5$), and mixtures thereof.
8. (Withdrawn) The magnetic head of claim 5, wherein said ~~anisotropic first~~ insulating ~~material~~ layer comprises a ceramic, said ceramic selected from the group consisting of $\text{Zr}_2\text{PW}_{12}\text{O}_{42}$, $\text{Sc}_2(\text{WO}_4)_3$, $\text{Sc}_2(\text{MoO}_4)_3$ and mixtures thereof.
9. (Currently Amended) The magnetic head of claim 1 additionally comprising a second insulating ~~ceramic~~ layer positioned adjacent said coils.
10. (Original) The magnetic head of claim 9, wherein said second insulating layer comprises a ceramic.
11. (Original) The magnetic head of claim 1, wherein said head comprises a plurality of conductive coils.
12. (Currently Amended) A slider having a magnetic read/write head, said magnetic read/write head comprising:
- a.) a base coat;
 - b.) a reader element comprising a transducer;
 - c.) a writer element, said writer element comprising at least one conductive coil, said coil being electrically insulated by a ~~composition which first~~ layer that has a negative coefficient of thermal expansion; and
 - d.) an overcoat.
13. (Original) The slider of claim 12, wherein said reader element is positioned adjacent said base coat.

14. (Currently Amended) The slider of claim 13, wherein the ~~slider~~ reader element additionally comprises ~~top first~~ and ~~bottom second~~ shields and said ~~reader element~~ transducer is positioned between respective ~~top first~~ and ~~bottom second~~ shields.
15. (Original) The slider of claim 12, wherein said base coat comprises a ceramic which is isotropic in its thermal expansion properties.
16. (Currently Amended) The slider of claim 12, wherein said writer element has a writer gap ~~defined by said plurality of insulated coils, said upper shared pole, and said top pole.~~
17. (Currently Amended) The slider of claim 16, wherein said writer element is positioned adjacent said ~~base coat~~ overcoat.
18. (Original) The slider of claim 12, wherein said overcoat comprises ceramic which is isotropic in its thermal expansion properties.
19. (Currently Amended) The slider of claim 12, wherein said ~~insulating composition~~ first layer is selected from the group consisting of a crystalline material, an amorphous material, a polycrystalline material.
20. (Currently Amended) The slider of claim 19, wherein said ~~insulating composition~~ first layer comprises a polycrystalline material.
21. (Currently Amended) The slider of claim 20, wherein said ~~insulating composition~~ first layer is isotropic in its thermal expansion properties.
22. (Withdrawn) The slider of claim 20, wherein said ~~insulating composition~~ first layer is anisotropic in its thermal expansion properties.

23. (Currently Amended) The slider of claim ~~claims 21 and 22~~, wherein said ~~insulating composition~~ first layer comprises a ceramic.
24. (Currently Amended) The slider of claim 21, wherein said ~~isotropic-insulating-material~~ first layer comprises a ceramic, said ceramic selected from the group consisting of ZrW_2O_8 , HfW_2O_8 , ZrV_2O_7 , HfV_2O_7 , $\text{ZrV}_{(2-x)}\text{P}_x\text{O}_7$, $\text{ZrW}_{(2-x)}\text{Mo}_x\text{O}_8$ (wherein $X \leq 1.5$), and mixtures thereof.
25. (Currently Amended) The slider of claim 22, wherein said ~~isotropic-insulating-material~~ first layer comprises a ceramic, said ceramic selected from the group consisting of $\text{Zr}_2\text{PW}_{12}\text{O}_{42}$, $\text{Sc}_2(\text{WO}_4)_3$, $\text{Sc}_2(\text{MoO}_4)_3$, and mixtures thereof.
26. (Currently Amended) The slider of claim 12 additionally comprising a second insulating ~~ceramic~~ layer positioned adjacent said coils.
27. (Original) The slider of claim 26, wherein said second insulating layer comprises a ceramic.
28. (Original) The slider of claim 12, wherein said magnetic read/write head comprises a plurality of coils.
29. (Currently Amended) A ~~slider having a magnetic head, said magnetic head~~ thin film structure comprising:
- a.) a reader element comprising a transducer;
 - b.) a writer element comprising a least one conductive coil; and
 - c.) at least one insulating element, said insulating element comprising a composition having a negative coefficient of thermal expansion.
30. (Currently Amended) The thin film structure ~~slider~~ of claim 29, wherein said insulating element electrically insulates said ~~writer element~~ at least one conductive coil.

31. (Currently Amended) The thin film structure slider of claim 29 wherein said writer element comprises a plurality of conductive coils, wherein said insulating element electrically insulates said conductive coils.
32. (Currently Amended) The thin film structure slider of claim 31 additionally comprising a second insulating element, said second insulating element is positioned adjacent said conductive coils.
33. (Currently Amended) The thin film structure slider of claim 32 wherein said second insulating element comprises a ceramic.
34. (Currently Amended) The thin film structure slider of claim 29, wherein said insulating element is positioned adjacent said conductive coils.
35. (Currently Amended) The thin film structure slider of claim 29, wherein said insulating element comprises a slider base coat.
36. (Currently Amended) The thin film structure slider of claim 29, wherein said insulating element comprises a slider overcoat.
37. (Currently Amended) The thin film structure slider of claim ~~35~~ 36 wherein said writer element is positioned adjacent said ~~base coat~~ overcoat.
38. (Currently Amended) The thin film structure slider of claim ~~36 and 37~~ 35 wherein said insulating element comprises a polycrystalline material.
39. (Currently Amended) The thin film structure slider of claim 38 wherein said insulating element is isotropic in its thermal expansion properties.

40. (Withdrawn) The thin film structure slider of claim 38 wherein said insulating element is anisotropic in its thermal expansion properties.
41. (Currently Amended) The thin film structure slider of claim 29 wherein at least one layer of said writer element includes said insulating element.
42. (Currently Amended) The thin film structure slider of claim 29 wherein at least one layer of said reader element includes said insulating element.